DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17 RIN 1018-AB27

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Threatened Concho Water Snake (Nerodia harteri paucimaculata)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Service is designating critical habitat for the Concho water snake (Nerodia harteri paucimaculata) under the authority of the Endangered Species Act of 1973 (Act), as amended. The Concho water snake was listed as a threatened species on September 3, 1986 (51 FR 31412); however, final designation of the proposed critical habitat was postponed at that time in accordance with section 4(b)(6)(C) of the Act. Critical habitat is now being designated in portions of the Concho and Colorado Rivers in Runnels, Tom Green, Concho. Coleman, and McCulloch Counties. Texas, with minor modification from the critical habitat originally proposed. Federal actions that may affect the areas designated as critical habitat are now subject to consultation with the Service, pursuant to section 7(a)(2) of the Act.

EFFECTIVE DATE: July 31, 1989.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service Ecological Services Field Office, Room 9A33, 819 Taylor Street, Fort Worth, Texas 76102.

FOR FURTHER INFORMATION CONTACT: Alisa Shull, (See **ADDRESSES** above) at 817/334-2961 or FTS 334-2961.

SUPPLEMENTARY INFORMATION:

Background

The Concho water snake (Nerodia harteri paucimaculata), a nonpoisonous snake, is a member of the family Colubridae, and together with the Brazos water snake (Nerodia harteri harteri) constitutes the species Nerodia harteri, collectively known as the Harter's water snake. The Concho water

snake was discovered in 1944 by J. Marr and was described as a distinct subspecies by Tinkle and Conant in 1961. This subspecies is relatively small for Nerodia; adults rarely exceed 900 millimeters (3 feet) total length. There are 21–23 dorsal scale rows, four rows of dark brown blotches arranged in alternate fashion on the grayish dorsal surface, and distinct to obscure dark spots along either side of the pink to orange venter (Wright and Wright 1957).

Adult Concho water snakes live in either shallow or deep water over a variety of substrates, as long as there is sufficient deep, secure shelter from predators near nursery grounds. Adults also use woody vegetation along the banks for basking. Juvenile Concho water snakes, however, have much more rigid habitat requirements, the two most important features of which are shallow water with a rocky substrate and medium to large flat rocks on the shore that provide hiding places (Scott and Fitzgerald 1985).

Historically, the Concho water snake occurred over about 330 miles of the Concho and Colorado Rivers and their tributaries. It is presently distributed discontinuously over a reduced range in Irion, Coke, Tom Green, Concho, Runnels, McCulloch, Coleman, Brown, Mills, San Saba, an Lampasas Counties (Williams 1971, Flury and Maxwell 1981. Brnovak 1975, Scott and Fitzgerald 1985, Rose 1985).

On December 30, 1982, the Service published a Notice of Review of Vertebrate Wildlife in the Federal Register (47 FR 58454). Nerodia harteri was included in category 1 of that notice. Category 1 includes those taxa for which the Service has substantial information on hand to support the biological appropriateness of a proposal to list the species as endangered or threatened.

On February 14, 1984, the New Mexico Herpetological Society petitioned the Service to list *Nerodia harteri* (including both subspecies) as threatened and designate its critical habitat. The Service found that substantial information had been presented indicating that the petitioned action might be warranted. A notice of this finding was published on May 18, 1984 (49 FR 21089). A 1-year finding was reported on July 18, 1985 (50 FR 29238). That finding held that the petitioned action was warranted for the Concho water snake but that such action was precluded by work on other pending proposals, in accordance with section 4(b)(3)(B)(iii) of the Act. The 1-year finding for the remaining subspecies, the Brazos water snake, was reported concurrently and held that the

petitioned action was not warranted for that subspecies. A proposed rule to list the Concho water snake and designate critical habitat was published on January 22, 1986 (51 FR 2923). The final rule listing the Concho water snake as a threatened species was published on September 3, 1986 (51 FR 31412). In accordance with section 4(b)(6)(C) of the Act, the proposed critical habitat designation was not made final at the time of listing, but was postponed for an additional year from the January 22, 1987, 1-year deadline to allow for gathering and analyzing of economic data.

Summary of Comments and Recommendations

In the January 22, 1986, proposed rule and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. The original comment period closed on March 24, 1986, but was reopened on April 3, 1986 (51 FR 9081), to accommodate a public hearing and remained open until May 2, 1986. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. A newspaper notice inviting general public comment was published in the San Angelo, Texas, Standard-Times on February 10, 1986. One hundred fifty-seven comment letters were received, and are discussed below. Two requests for a public hearing were received, and a hearing was held in Ballinger, Texas, on April 3, 1986. Interested parties were contacted and notified of that hearing, and notices of the hearing were published in the Federal Register on March 17, 1986; the Abilene, Texas, Reporter-News on March 18, 1986; the Big Spring, Texas, Herald on March 19, 1986; the Midland, Texas, Reporter-Telegram on March 15, 1986; and the San Angelo, Texas, Standard-Times on March 20, 1986. Comments received in the hearing are also summarized below.

The public hearing held in Ballinger, Texas, was attended by about 350 people. Fifty-seven oral or written statements were given, 5 is support of the proposal, 46 questioning or in opposition, and 6 neither in support nor opposition. A transcript of this hearing is available for inspection (see ADDRESSES). Organizations represented at the hearing included: U.S House of Representatives; Texas Governor's Office; U.S. Geological Survey; U.S. Army Corps of Engineers; USDA Soil Conservation Service; Texas Parks and

Wildlife Department; Texas Department of Highways; Texas General Land Office; Texas Water Development Board; Big Country Audubon Society; Sierra Club; National Audubon Society; Cities of Midland, San Angelo, Ballinger, Coleman, Odessa, Abilene, Paint Rock, and Winters; Counties of Concho, Runnels, Coleman, and Tom Green; five State legislative districts; six local and regional water boards; and several local governmental or business organizations.

The 157 letters received were from 460 parties; several multiple-party and petition letters were received. Of those, 88 letters from 111 parties were in support of the proposed critical habitat, 51 letters from 322 parties questioned or opposed the proposal, and 18 letters from 27 parties were neither in support

nor opposition.

All letters and written or oral statements received regarding critical habitat designation are combined in the following discussion. Comments in the letters and statements concerning the proposed listing of the Concho water snake have already been addressed in the final listing rule published in the Federal Register on September 3, 1986 (51 FR 31412). Comments on specific water projects (the need for each project, possible effects of this proposal on such projects, and specific features of alternative projects) are addressed here only if they requested or resulted in specific changes to the proposal or to the rule procedure on critical habitat designation. Information regarding the possible economic effects of the proposed critical habitat on such projects can be found in the Economic Analysis, which is summarized later in this rule. Comments received are available for inspection (see ADDRESSES).

Comments of support were received from Texas Parks and Wildlife Department; Texas General Land Office: National Audubon Society; Big Country Audubon Society; Defenders of Wildlife; Sierra Club; Texas Chapter of the Wildlife Society: American Society of Ichthyologists and Herpetologists; New Mexico Herpetological Society; Society for the Study of Amphibians and Reptiles; 94 private individuals or groups; and biologists from Texas A&I University, New York Zoological Society, Midland College, Angelo State University, Dallas Zoo, Central Texas College, Hardin-Simmons University, Texas A&M University, and Texas Tech University.

Comments questioning or in opposition to the proposal were received from Congressman Charles Stenholm; Texas Water Development Board; Texas Water Commission; Cities of Big Spring, Winters, Midland, San Angelo, Ballinger, Coleman, Odessa, Abilene, and Paint Rock; Counties of Brown, Concho, Runnels, and Coleman; six state legislators; Upper Colorado River Authority; Colorado River Municipal Water District; San Angelo Water Advisory Board; Central Colorado River Authority; West Central Texas Municipal Water District; and 324 private individuals or groups.

Economic information or neutral letters were received from the Bureau of Reclamation, Bureau of Land Management, Environmental Protection Agency, Federal Highway Administration, Soil Conservation Service, U.S. Army Corps of Engineers, Federal Emergency Management Agency, Texas Governor's Office, Texas System of Natural Laboratories, and 3 private individuals.

Summaries of all substantive comments addressing the issue of critical habitat designation for the Concho water snake are covered in the following discussion. Comments of similar content are grouped in a number of general issues with the Service's response to those issues and comments.

Issue 1: The sufficiency of the size of the critical habitat was questioned by two commenters. The Lone Star Chapter of the Sierra Club stated that they do not believe the proposed critical habitat goes far enough in securing all Concho water snake habitat and ensuring that areas are protected for reintroduction or population supplementation. They requested that the entire 199 miles of occupied range known at the time of proposal be included in the critical habitat designation, and that other areas be identified in the designation for reintoduction sites. Dr. John Peslak, of Hardin-Simmons University in Abilene, Texas, questioned whether the proposed critical habitat is "sufficient to insure the survivial of the snake even if the Stacy Dam becomes a reality?"

Service Response: The critical habitat designated in this rule includes all known occupied Concho water snake habitat that contains those constituent elements that are essential to the conservation of the species and that may require special management considerations or protection. Stream and reservoir banks that are essential for the conservation of the species are included. The Service will continue to evaluate other areas for future inclusion in the critical habitat.

Issue 2: Three commenters requested removal of, or questioned the need for, various areas of the proposed critical habitat. Both the Texas Water Development Board and the Texas Water Commission requested that the

Stacy Reservoir area be excluded from the critical habitat designation for economic reasons. Section 4(b)(2) of the **Endangered Species Act provides that** the Secretary of the Interior may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as critical habitat, unless failure to designate such area as critical habitat would result in the extinction of the species. The two agencies believe that the economic benefits of the water supply to be provided by the construction of Stacy Reservoir outweigh the benefits of the critical habitat designation.

Service Response: The reservoir basin is not withdrawn from the critical habitat designation. Concho water snake populations were found at Lake Spence and Lake Moonen in both 1987 and 1988 (Thornton and Dixon 1988). With this information on occurrence of Concho water snakes in reservoirs, and from a survey of the potential Concho water snake habitat on the future Stacy Reservoir shoreline, the recognized potential for the snake to inhabit Stacy Reservoir is substantially greater than when the designation of critical habitat was proposed. The retention of the critical habitat designation for the reservoir basin is necessary to provide protection for the potential habitat sites within the reservoir basin. In light of the Service's biological opinion that the Stacy project is not likely to jeopardize the continued existence of the Concho water snake or to result in the destruction or adverse modification of the proposed critical habitat, no disruption to the construction or operation of Stacy Dam and Reservoir is expected. Any impacts from the designation would be limited to possible restrictions on land use along those shoreline areas surrounding the reservoir that are potential or occupied Concho water snake habitat. Therefore, the benefits of retaining these areas in the critical habitat outweigh the benefits of excluding them.

A private landowner on the Concho River inquired about the basis for the 15 vertical foot provision in the proposed critical habitat designation. This commenter pointed out that the provision would result in extension of the critical habitat 1½ miles up Concho Creek, and states that although he has observed the Concho water snake many times, he has never found one more than 10 feet from the edge of the water.

Service Response: The basis of the 15 foot elevation line is the average general depth of the incision of the river into the surrounding countryside. The 15 feet is

not a measurement along the surface of the ground, but is instead a horizontal line rising 15 feet above the water surface at median discharge. The distance from the water's edge to the point at which that line intersects the bank will depend upon the flow at the specific point in time, as well as the degree of slope of the channel banks. The importance of these riparian areas is the maintenace of stream bank integrity, which is important for preservation of actual water snake habitat. The Service acknowledges that there is no benefit to the snake from extension of the critical habitat more than 1/2 mile upstream into most tributary streams. The Concho water snake generally does not use tributary streams, particularly those that have only ephemeral flow. Therefore, the critical habitat has been modified in this rule to limit the extension of the critical habitat to ½ mile upstream into any tributary of the Concho and Colorado Rivers or to Stacy Reservoir at the conservation pool level.

Issue 3. Three commenters questioned the process for economic analysis of the critical habitat, or asked for specific considerations in that process. The Lone Star Chapter of the Sierra Club asked that economics not be considered in the critical habitat designation.

Service Response: The Endangered Species Act (section 4(b)(2)) specifies that the "economic impact, and any other relevant impact" be considered in the final designation of critical habitat. In addition, critical habitat designation is also subject to Executive Order 12291, which requires, to the extent permitted by law, that all regulatory actions will have benefits outweighing costs, and that the alternative with the largest net benefit shall be chosen; to the Regulatory Flexibility Act, which requires analysis of the impacts of regulatory actions on small entities; and, to the Paperwork Reduction Act, the purpose of which is to minimize the paperwork and resulting costs of regulatory actions. Only the listing portion of the proposed rule was exempt from economic considerations.

The Texas Water Development Board objected to the delay in completing an economic analysis of the critical habitat. The Board pointed out that in July 1983 they notified the Service of potential conflicts between water development and the proposed critical habitat and recommended that a comprehensive economic analysis be conducted. They questioned why no analysis had yet been done at the time of the publication of the proposed rule on listing and critical habitat in January 1986.

Service Response: When critical habitat designation is proposed concurrently with the listing of a species, as is required (with certain exceptions) by the Act, the economic analysis is not conducted prior to proposal to avoid non-biological considerations from influencing or delaying the listing. This procedure is based upon the specific requirement of the Act that listing actions be based on the best biological and commercial data available.

The Big Country Audubon Society requested that the Service's economic analysis focus on patterns of water use in the area.

Service Response: As a result of the reasonable and prudent alternatives developed for the Stacy Reservoir, there are no known conflicts between the critical habitat designation and any specific water development in the area. Therefore, the economic analysis addresses water use patterns only to the extent that the Stacy biological opinion results in economic costs for such use natterns.

Compensation costs that must be paid by the Colorado River Municipal Water District for construction of Stacy Reservoir include hiring of a biologist to oversee all phases of construction, funding studies on Concho water snake life history, genetics, and habitat requirements, and construction of riffle habitats in the river. However, these costs are part of the reasonable and prudent alternatives needed to relieve jeopardy to the Concho water snake and would be required even if no critical habitat were proposed.

Issue 4: One commenter presented several questions regarding the impacts of critical habitat designation on private property fronting on the critical habitat. He specifically questioned if the critical habitat designation would affect his water rights or his ability to control brush along the river and draws. He states that landowners will suffer economically from the critical habitat designation through loss of control and full use of their property and water rights.

Service Response: The land and water rights of private landowners are in no way affected or limited by the designation of critical habitat. Critical habitat provides protection only from Federal actions. It does not affect private actions, lands, water or any other rights, unless the private actions are Federally funded or if they require a Federal permit. Brush control by a private individual on private lands would not be affected unless Federal money is being used in the project.

Private water rights would not be affected per se. However, if the mechanism used to develop the water right involves actions in the river channel that require a permit under the Clean Water Act, the Rivers and Harbors Act, or other such Federal legislation, then the proposed permit for the mechanism would be subject to consultation with the Service under section 7 of the Endangered Species Act. The effect, if any, of the consultation on the mechanism for implementing the water right would vary depending on the location and type of action. Such effects are generally minor and may involve some modifications to the project to accommodate the species and/or its critical habitat.

Issue 5: Several commenters suggested actions that they think should be taken instead of critical habitat designation, or as a necessary adjunct to the designation. The Texas General Land Office, Natural Heritage Program, believes that assurances of adequate stream flows for reproduction and growth of the Concho water snake should be included in the critical habitat designation.

Service Response: Minimum stream flows and flood or channel maintenance flows are provided for most of the critical habitat as a part of the reasonable and prudent alternatives set forth in the Service's biological opinion resulting from the consultation on Stacy Reservoir. These flow requirements are included in the constituent elements for the designated critical habitat at the end of this rule.

The Lone Star Chapter of the Sierra Club requested that the Service seek easement, water rights, or fee title to riparian areas critical to the Concho water snake.

Service Response: At present none of these measures appear to be necessary to the continued survival and recovery of the Concho water snake. As the implementation of the reasonable and prudent alternatives of the Section 7 consultation on Stacy Reservoir proceeds, areas may be identified for which easement or full-title acquisition may be desirable.

A private landowner questioned whether critical habitat will do anything to enhance the Concho water snake as long as nothing is done to eliminate natural predators.

Service Response: Although fish may prey upon young Concho water snakes, there are no data that suggest fish or predation in general, have been a major factor in the overall decline of the Concho water snake.

Critical Habitat

Critical habitat, as defined by section 3 of the Act means: (i) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

The future Stacy Reservoir basin will be included in the final designation of critical habitat. With recent information on occurrence of Concho water snakes at Spence and Moonen reservoirs, and from a survey of the potential water snake habitat on the future Stacy Reservoir shoreline, the potential for the snake to inhabit Stacy Reservoir appears significantly greater than previously thought. About 63 km of the future lake shoreline between elevations 1,530 feet and 1,551.5 feet (conservation pool level) were found to contain rocky habitat similar to that found in Spence and Moonen reservoirs. This is 26 and 33 percent of the shoreline at the two elevations, respectively. Open spaces between rocky habitat areas are less than 800 meters, which would allow at least some movement of snakes between sites.

Because of the uncertain time factor and other variables, the Service does not believe that future reservoir habitat will be equal to the amount of stream habitat lost to impoundment. However, the Service believes that successful occupation of a number of sites around Stacy Reservoir by the Concho water snake would significantly reduce the fragmentation effect by providing a corridor for gene flow through snake movement. Translocation of snakes above and below the Dam may be necessary to augment natural movements if they are found to be insufficient.

In addition, the March 7, 1989 amendment to the biological opinion provides that the 17 segments of future Stacy Reservoir shoreline identified in the 1988 Annual Report (Thorton and Dixon 1988) and maps as potential Concho water snake habitat are to be protected by the Colorado River Municipal Water District from development for housing, industry, agriculture, recreation or other activities that could have an adverse effect on snake habitat.

The areas that are included in the critical habitat designation contain essential elements for the conservation of the Concho water snake. These include: riffles for feeding and resting, rocky gravel bars that provide shelter for neonates, larger rocks that adults and subadults use for basking or for shelter, brush/debris piles adjacent to riffles for shelter, low tree limbs overhanging the river for basking (usually adjacent to riffles), minimum stream flows (see item 4 of amendment to 50 CFR 17.95(c) at end of this rule), and rocky areas and stream pool banks for movement to other areas (Dixon, Greene, and Mueller 1988; Thorton and Dixon 1988).

The Concho water snake is protected from taking and harm by section 9 of the Act, and is protected against adverse impacts to the snake itself from Federal actions. Critical habitat designation provides that additional protection of that habitat from adverse impacts of Federal actions. This habitat protection is consistent with the habitat protection needs outlined in the biological opinion, as amended, on Stacy Dam. These needs include protection of approximately 17 segments of reservoir shoreline habitat, restoration of riffle habitats, stream and habitat monitoring, and maintenance of minimum flows.

Section 4(a)(3) of the Act requires that critical habitat be designated to the maximum extent prudent and determinable concurrently with the determination that a species is endangered or threatened. Section 4(b)(6) requires that a proposed listing be made final within one year from the publication of the proposal, but provides for an additional one-year extension for the final designation of critical habitat, if necessary. Critical habitat is being designated for the Concho water snake (Nerodia harteri paucimaculata) in the following areas:

- 1. Concho River in Tom Green and Concho Counties, Texas. A stretch extending from Mullin's Crossing located 5 miles northeast of the town of Veribest, downstream to the confluence of the Concho and Colorado Rivers.
- 2. Colorado River in Runnels, Concho, Coleman. and McCulloch Counties, Texas. A stretch extending from the Farm to Market Road 3115 bridge near the town of Maverick downstream to the confluence of the Colorado River and Salt Creek, northeast of the town of Doole.

Both stretches include both the river channel and the river banks up to 15 vertical feet above the water level at median discharge. However, the critical habitat is limited to no more than ½

mile upstream on any tributaries of either the Concho or Colorado Rivers. The Service will continue to evaluate other areas for future designation ascritical habitat.

3. The entire future Stacy Reservoir basin up to the maximum water level of 1551.5 foot elevation, and including reservoir banks up to 15 vertical feet above the 1551.5 foot elevation.

This critical habitat designation has been modified from the area proposed. Critical habitat is limited to no more than 1/2 mile upstream on any tributary of either the Concho or Colorado Rivers. and the portions of the Concho and Colorado Rivers that will become Stacy Reservoir have been retained in the critical habitat designation. The dam that will create the reservoir is currently under construction and was the subject of consultation under section 7 of the Act. The December 19, 1986, biological opinion (as amended March 7, 1989) resulting from that consultation, set forth reasonable and prudent alternatives for creating and preserving habitat elsewhere. If implemented, those alternatives would reduce the impacts of the reservoir on proposed critical habitat to levels that would not significantly diminish the value of the proposed critical habitat (or its constituent elements) for the survival and recovery of the Concho water snake.

The Service issued an amended biological opinion on March 7, 1989, based on its review of new information. including the discovery of Concho water snake populations in two reservoirs. Concho water snakes are expected to colonize the Stacy Reservoir. Therefore. certain requirements in the original biological opinion have been reduced or eliminated. The eliminated requirements include construction of artificial habitats in the reservoir basin, and construction of low head dams, gabions, and aritificial riffle habitats on the lower Colorado River from Winchell to a point about 33 miles downstream. Monitoring of stream and stream habitat has also been reduced. Riffle habitats are to be restored in the upper Colorado River. Construction of other low head dams, gabions, and artificial riffles on the lower Colorado River from a point about 33 miles below Winchell downstream about 16 miles to Pecan Bayou has been delayed pending evaluation of prototype structures in the upper Colorado River and changes in the lower Colorado River. The approximately seventeen segments of reservoir shoreline habitat that were identified in the 1988 Annual Report (Thornton and Dixon 1988) must be protected from adverse impacts.

The entire Stacy Reservoir basin has been included in designation of critical habitat because this area is expected to contribute to viable Concho water snake populations. This is a change from the proposed critical habitat because it include all areas that will be inundated following construction of Stacy Dam.

In addition, the proposed critical habitat has been modified to limit designation of critical habitat to the lower 1/2 mile of streams tributary to the Concho and Colorado Rivers or to Stacy Reservoir at the conservation pool level. The proposed critical habitat included land areas inside of a horizonal line drawn outward from a point 15 vertical feet above the level of median discharge of the river. It was pointed out during the comment period that because of the low topographic relief of the area, this provison allowed the proposed critical habitat to extend upstream into some tributaries for 1 to 2 miles. However, only the mouths of these tributaries and their banks are considered to be critical to the species' survival. Therefore, the extension of the critical habitat up the tributary streams has been limited to ½ mile.

The constituent elements of the final critical habitat are biologically important to the survival of viable Concho water snake populations. Stream and reservoir bank integrity must be maintained to provide areas for the water snakes to rest, bask, and travel between sites. Riffle habitats are important feeding and resting areas for water snakes, especially neonates. Rocky substrates of different sizes provide shelter sites for water snakes of all age groups. Minimum stream flow requirements must be met (see item 4 of amendment to 50 CFR 17.95(c) at end of this rule). Water quality maintenance contributes to an ample prey base. The stretches of river and the reservoir basin in this critical habitat designation contain the constituent elements that are necessary for Concho water snake survival.

Section 4(b)(8) requires, for any proposed or final regulation that designates critical habitat, a brief description and evaluation of those activities (public or private) that may adversely modify such habitat or may be affected by such designation. Any activity that would lessen the amount of minimum flow, or would significantly alter the natural flow regime in those portions of the Concho and Colorado Rivers, could adversely impact the critical habitat. Such activities include, but are not limited to, impoundment and water diversion. Any activity that would extensively alter the channel and bank

morphology in those river portions and result in a significant decrease in the amount or quality of riffle habitat could adversely impact the critical habitat. Such activities include, but are not limited to, channelization, excessive sedimentation, mining or rock and gravel, pollution, impoundment, and removal of riparian vegetation. Any activity that would significantly alter the water chemistry or temperature regime in those river portions could adversely impact the critical habitat. Such activities include, but are not limited to, release of chemical or biological pollutants into the waters at a point source or by dispersed release.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of designating a particular area as critical habitat. The Service has considered the critical habitat designation in light of all additional relevant information obtained during the public comment period and public hearings. An Economic Analysis and Determination of Effects of Rules for the critical habitat designation have been prepared and are available upon request. No significant economic or other impacts are expected from this designation of critical habitat for the Concho water snake. The additional information received has been addressed in the "Summary of Comments" section of this rule or in the economic documents prepared on the rule. Conclusions of the economic assessments are summarized in the "Regulatory Flexibility Act and Executive Order 12291" section of this rule.

Available Conservation Measures

Section 7(a)(2) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is listed as endangered or threatened and with respect to the habitat that has been designated as critical. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402. Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a Federal action may affect the listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

Concho water snakes are found only in rivers, reservoirs and their shorelines, and adjacent riparian areas on private, State, or county owned lands. This critical habitat designation is expected to have little effect upon the present land and water uses in the area. Known Federal activities that may be affected by this critical habitat designation are future federally funded or authorized dam and reservoir construction; highway, bridge, and pipeline construction; or irrigation projects. Such activities, although on private lands, would be subject to section 7 consultation if Federal funding were involved, or if the activity requires Federal authorization.

The threatened status of the Concho water snake, under provisions of section 4(a)(1) of the Endangered Species Act of 1973, as amended, is not affected by this designation of its critical habitat.

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the Federal Register on October 25, 1983 (48 FR 49244).

Regulatory Flexibility Act and Executive Order 12291

The Department of the Interior has determined that designation of critical habitat for this species is not a major rule under Executive Order 12291 and certifies that this designation will not have a significant economic effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). No additional costs to Federal or non-Federal entities caused by critical habitat designation have been identified. The Service and the Soil Conservation Service (SCS) completed an informal consultation on a planned floodwater retention project. The SCS determined that the project would have no adverse effect on the Concho water snake or its critical habitat, and the Service concurred with this conclusion. The above findings are based on opinions rendered by the agencies involved, and on the following: Bureau of Reclamation's normal and expected management of water releases from upstream reservoirs; the expectation that no additional economic impacts will accrue to Stacy Dam and Reservoir as a result of the designation of critical habitat; the absence of other ongoing or planned Corps of Engineers or Federal Emergency Management Agency projects in the vicinity of the critical habitat; the expectation of either no impacts or beneficial impacts from

existing and partially completed SCS projects in the vicinity of the critical habitat; the existence of easily added protective mechanisms that can be used to protect against adverse modification of critical habitat by the All-American pipeline; current Environmental Protection Agency standards on National Pollution Discharge Elimination System permits in the river basin; and Federal Highway Administration policies for avoiding adverse environmental effects. In addition, no State or private activities involving Federal funds or permits are expected to affect or be affected by the critical habitat designation.

Therefore, no significant economic impacts are expected to result from the critical habitat designation. In addition, no direct costs, enforcement costs, or information collection or recordkeeping requirements are imposed on small entities by the designation. These determinations are based on a Determination of Effects of Rules that is available upon request (see ADDRESSES).

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Author

This rule was prepared by the Endangered Species Staff, Region 2, U.S. Fish and Wildlife Service, Albuquerque, New Mexico.

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, is amended as set forth below:

1. The authority citation for Part 17 continues to read as follows:

Authority: Pub. L. 93–205, 87 Stat. 884; Pub. L. 94–359, 90 Stat. 911; Pub. L. 95–632, 92 Stat. 3751; Pub. L. 96–159, 93 Stat. 1225; Pub. L. 97–304, 96 Stat. 1411 (16 U.S.C. 1531 et seq.); Pub. L. 99–625, 100 Stat. 3500 (1986); Pub. L. 100–478, 102 Stat. 2306 (1988), unless otherwise noted.

2. Amend § 17.95(c) by adding the critical habitat of the Concho water snake in the same alphabetical order as the species occurs in § 17.11(h):

§ 17.95 Critical habitat-fish and wildlife.

(c) * * *

Concho Water Snake (Nerodia harteri paucimaculata)

Texas: Areas of land and water as follows:

1. Tom Green and Concho Counties.

Concho River: The mainstream river channel and river banks, up to a level on both banks that is 15 vertical feet above the water level at median discharge (but not extending more than ½ mile upstream on any tributary stream); extending from Mullin's Crossing, northeast of the town of Veribest downstream to the confluence of the Concho and Colorado Rivers.

2. Runnels, Concho, Coleman, and McCulloch Counties. Colorado River: The mainsteam river channel and river banks, up to a level on both banks that is 15 vertical feet above the water level at median discharge (but not extending more than ½ mile upstream on any tributary steam); extending from the Farm to Market Road 3115 bridge near the town of Maverick downstream to the confluence of the Colorado River and Salt Creek, northeast of the town of Doole.

3. The entire future Stacy Reservoir basin up to the conservation pool level of 1551.5 feet elevation, and including reservoir banks up to 15 vertical feet above the 1551.5 feet elevation, and including tributary streams for not more than ½ mile upstream from the conservation pool level.

4. Constituent elements include shallow riffles and rapids with rocky cover, minimum steam flows, dirt banks, rocky shorelines, and woody riparian vegetation. Minimum flows include the following:

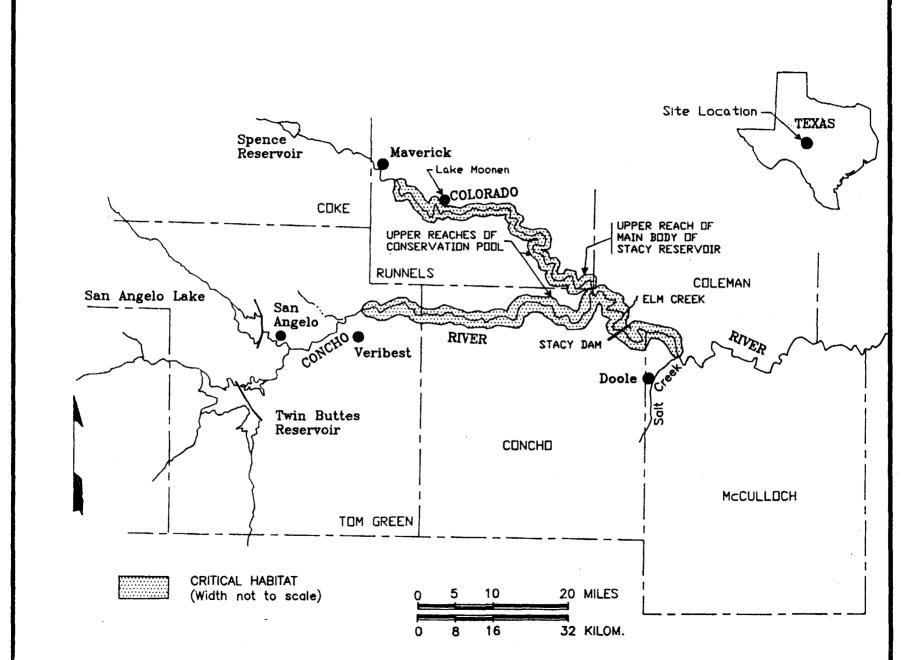
(a) A continous, daily flow of 10.0 cubic feet/second (cfs) in the Colorado River from E.V. Spence Reservoir to Ballinger, Texas.

(b) A flushing flow of 600 cfs from E.V. Spence Reservoir for a duration of 3 consecutive days (at any time during the months of November through February), at least every other year for channel maintenance.

(c) A continuous, daily minimum flow of 11.0 cfs in the Colorado River between Stacy Dam and Pecan Bayou between April and September each year, and a minimum of 2.5 cfs between October and March of each year.

(d) Flushing flows of 2500 cfs from Stacy Reservoir for 2 consecutive days at least once every 2 years for channel maintenance.

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Dated: June 20, 1989.

Susan Recce Lamson,

Assistant Secretary for Fish and Wildlife and

Parks.

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